

**REMARKS**

Claims 1-51 are canceled. Claims 52-80 are added, and now active in this application.

The present invention is directed to a method of treating trypanosomiasis in a mammal, the method entailing administering to the mammal a compound of formula (I), and notably canthin-6-one.

Trypanosomiasis is a disease which results from infection by a trypanosome, notably *Trypanozoma cruzis* and *Trypanosoma brucci*. See attached documents 4, 6 and 8.

Trypanosomes are protozoans, i.e., one celled eukaryotes. They are predators to several other microorganisms, including bacteria (see encyclopaedia - the free dictionary. com). See attached document 5.

Hence, protozoans are clearly a distinct class of microorganisms from bacteria. See attached document 7.

Known prior art treatments of trypanosomiasis have been based on two families of compounds: nitroimidazoles, like benzimidazole, and nitrofurans like nifurtimox.

Claims 37, 38, 45, 46, 50 and 51 stand rejected under 35 USC 102(b) as being anticipated by Ma (Phytochemistry).

However, in view of the above amendments, this ground of rejection is deemed moot.

Claims 37-42, 45, 50 and 51 stand rejected under 35 USC 102(b) as being anticipated by Nelson.

However, in view of the above amendments, this ground of rejection is deemed moot.

Claims 37-41, 45, 50 and 51 stand rejected under 35 USC 102(b) as being anticipated by Omoto (JP 02004790).

However, in view of the above amendments, this ground of rejection is deemed moot.

Claims 22, 26-29, 32-41, 45, 46 and 48-51 stand rejected under 35 USC 102(b) as being anticipated by Mitscher.

However, Mitscher merely discloses (abstract) molecules extracted from plants of the canthin-6-one family, and their use as anti microbial agents.

“Antimicrobial” is a general word which includes antibacterials, antivirals, antiprotozoans and antifungals. See attached document 3.

Moreover, Mitscher is more specific: see p. 7 the 1<sup>st</sup> paragraph after the abstract. The plant extract has been tested for its antibacterial activity. We join reference 1 cited as footnote 1 by Mitscher which discloses the biological tests. This last document confirms that the test has been performed exclusively on bacteria. See attached documents 1 and 2.

The products of the Mitscher publication have been tested in the same test protocol as the protocol of reference 1 (see p. 9, l. 5-9 and reference 18).

And all the other information provided by Mitscher is directed to chemical synthesis.

No test and even less results are provided.

Clearly, one skilled in the art would understand Mitscher to disclose that canthin-6-one and some derivatives thereof have been synthesized in order to be tested as antibacterials.

However, this reference clearly fails to disclose or suggest use of canthin-6-one or a derivative thereof for the treatment of an infection by a protozoa.

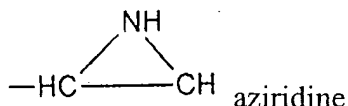
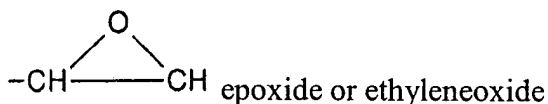
Notably, there is no evidence of a relationship of record between anti-bacterial treatment and anti-protozoan treatment.

Hence, this ground of rejection is unsustainable and should be withdrawn.

Claims 22, 26-29, 32-41, 45 and 49-51 stand rejected under 35 USC 112, second paragraph.

However, in view of the above amendments this ground of rejection is deemed moot for the first part of this rejection.

Applicants traverse the second part of this rejection, however, by noting that R1-R8 may be C2-C6 heterocyclic group and such heterocycles are well know to those skilled in the art. For example, epoxides and aziridines are well known and have the formulae shown below:



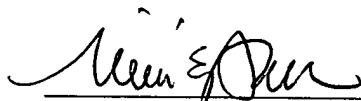
Hence, this part of the rejection is now deemed to be moot. See attached documents 9-11.

Finally, Applicants also enclose herewith a Substitute Specification, as requested, which includes both an Abstract of the Disclosure and a Brief Description of the Drawings.

Accordingly, it is believed that this application now stands in condition for allowance.

Early notice to this effect is earnestly solicited.

Respectfully submitted,  
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